

September 18, 2006

REMARKS

Summary of Personal Interview with the Examiner

On August 28, 2006, Examiner Satya Sastri and Applicants' representative, Mr. Andrew Merriam, conducted a personal interview to further prosecution in the instant application. During the interview, the parties discussed the propriety of the rejections outstanding on the record. The Applicant wishes to thank the Examiner for extending the courtesy of a personal interview.

Support for the Amendments to the Claims

The amendment to instant claim 1, at line 4, and at claim 10, line 5, seeks solely to more clearly define Applicants' invention. Support for this amendment may be found, for example, in the instant specification at page 2, lines 3-8.

The amendment at the end of instant claims 1 and 8 seeks solely to better define the olefinic functional air curable polymer aqueous dispersion of the present invention. Support for this amendment may be found, for example, in the instant specification at page 13, lines 10-24. The recited amine catalysts provide increased processing flexibility. See the instant specification at, for example, page 13, lines 22-23.

The amendment at the end of instant claim 4 seeks solely to define preferred catalysts for incorporating the instantly recited co-reactive olefinic material into the instantly recited precursor polymer. Support for this amendment may be found, for example, in the instant specification at page 13, lines 12-23.

Instant claim 8 has been amended to add a period (.) at the end of the claim.

Upon entry of the present amendment, claims 1-8 and 10 will stand pending in the instant application. No new matter is added by the present amendment.

The Invention

The aqueous dispersion polymers instantly recited comprise epoxy groups and pendant ethylenically unsaturated side chains that are autooxidizeable in the presence of oxygen. The instantly recited aqueous dispersion polymers are by the reaction of at least one co-reactive olefinic material with at least one epoxy

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group on a precursor polymer, i.e. that has already been polymerized. The instantly recited aqueous dispersion polymers provide advantages over the art in which fatty acid monomers have been copolymerized with ethylenically unsaturated monomers because in such polymers the presence of the ethylenically unsaturated monomers inhibits the polymerization of the fatty acid monomers. Thus, the fatty acid containing polymers of the cited art make it difficult to reduce residual monomer levels to environmentally safe standards, and prevent air curing of the polymer over a useful time frame. See, for example, the instant specification at page 2, lines 4-8 and page 7, lines 6-12.

Claim Rejections Under 35 USC §§ 102 and 103

Claims 1, 2, 7-8 and 10 stand rejected under 35 USC 102(b) as anticipated by, or, alternatively, under 35 USC 103(a) as obvious over JP 60221469A, to Kansai Paint (hereinafter "JP '469A"), of record. The Applicants respectfully traverse these rejections.

JP '469A fails to disclose any epoxy group containing polymer particle, as instantly recited. See the Abstract, 1st sentence (monomer reaction product of A1 and A2 will not have an epoxy group). Further, regarding instant claims 1-7 and 10, JP '469A fails to disclose or even suggest any strong base catalyst, such as the secondary or tertiary amines instantly recited. See the instant specification at page 13, lines 5-24. Regarding instant claim 2, JP '469A fails to disclose any third stage of a polymer or any multistage polymer, as instantly recited. Further, regarding instant claim 8, JP '469A fails to disclose preparing a precursor polymer containing at least one epoxy group, and then reacting said at least one epoxy group on said precursor polymer with at least one co-reactive olefinic material, as instantly recited. See the Abstract, 1st sentence (no reaction of A2 with polymer). The instantly recited order of polymerization and then reaction is critical to give an autooxidizable polymer. See "The Invention", above.

JP '469A fails to teach or suggest all of the features of the instant claims. Further, JP '469A, even taken in combination with one or all of the other cited references, fails to render obvious the instant claims. Accordingly, as JP '469A

fails to disclose, teach or suggest each feature of the instant claims, JP '469A fails to anticipate or render obvious the instant claims.

Claims 1, 2, 7-8 and 10 stand rejected under 35 USC 102(b) as anticipated by, or, alternatively, under 35 USC 103(a) as obvious over JP 59152965A, to Ikeda et al. (hereinafter "Ikeda"), of record. The Applicants respectfully traverse these rejections.

Regarding instant claims 1-7 and 10, Ikeda fails to disclose any secondary or tertiary amine strong base catalyst, as is instantly recited. Contrast the instantly recited amines with Ikeda, Reference Examples 1-8, pages 12, 14, 15, 17, 19, 20, 23. Further, regarding instant claim 2, Ikeda fails to disclose any third stage of a polymer or a multistage polymer, as instantly recited.

Regarding instant claim 8, Ikeda fails to disclose preparing a precursor polymer containing at least one epoxy group, and then reacting said at least one epoxy group on said precursor polymer with at least one co-reactive olefinic material, as instantly recited. See the Ikeda, page 3, lines 15-20 and Reference Examples 1-9, pages 12-26. The instantly recited order of polymerization and then reaction is critical to give an autooxidizable polymer and limit the residual monomer content upon polymerization. See "The Invention", above.

Ikeda fails to teach or suggest all of the features of the instant claims. Further, Ikeda, even taken in combination with one or all of the other cited references, fails to render obvious the instant claims. Accordingly, as Ikeda fails to disclose, teach or suggest each feature of the instant claims, Ikeda fails to anticipate or render obvious the instant claims.

Claims 1-4 and 6-10 stand rejected under 35 USC 102(b) as anticipated by, or, alternatively, under 35 USC 103(a) as obvious over DE 4105134 C, to Lorkowski et al. (hereinafter "Lorkowski"), of record. The Applicants respectfully traverse these rejections

Lorkowski is further removed from the instant invention than Ikeda or JP '469A. Lorkowski fails to disclose any epoxy group containing polymer particle, as instantly recited. See the Abstract, 1st sentence (monomer (a1) does not have an epoxy group). Further, regarding instant claims 1-7 and 10, Lorkowski fails to

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disclose strong base catalysts, such as the secondary or tertiary amines instantly recited. See the instant specification at page 13, lines 5-24 and contrast Lorkowski at Abstract (b). Regarding instant claim 2, Lorkowski fails to disclose any third stage of a polymer or any multistage polymer, as instantly recited. Further, regarding instant claim 8, Lorkowski fails to disclose preparing a precursor polymer containing at least one epoxy group, and then reacting said at least one epoxy group on said precursor polymer with at least one co-reactive olefinic material, as instantly recited. See the Abstract, 1st sentence (no reaction of (a1) with polymer). The instantly recited order of polymerization and then reaction is critical to give an autooxidizable polymer. See "The Invention", above.

Lorkowski fails to teach or suggest all of the features of the instant claims. Further, Lorkowski, even taken in combination with one or all of the other cited references, fails to render obvious the instant claims. Accordingly, as Lorkowski fails to disclose, teach or suggest each feature of the instant claims, Lorkowski fails to anticipate or render obvious the instant claims.

Claims 5 stands rejected under 35 USC 103(a) as obvious over Lorkowski, of record, in view of Saunders et al., US Patent no. 4,482,691 (hereinafter "Saunders"). The Applicants respectfully traverse these rejections.

Each of Saunders and Lorkowski fail to disclose, teach or suggest an epoxy containing polymer, as instantly recited. Further, each of Saunders and Lorkowski fails to instantly recited a secondary amine and a tertiary amine, as instantly recited in claims 1-7 and 10. Thus, even if the combination of Saunders and Lorkowski, is proper, it fails to meet every feature of the instant claims and does not render the instantly recited invention obvious.

A01508
Amendment and Response

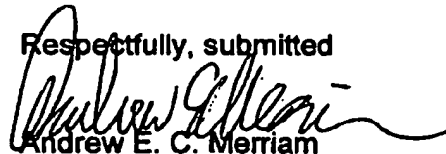
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CONCLUSION

Based on the foregoing, the instant claims are believed to be in current condition for allowance. An early and favorable response is earnestly solicited. If the examiner has any questions problems concerning the instant application, she is urged to contact the undersigned at the number given below.

No fees are believed due. In the event that any fees are found owing, please charge deposit account no. 18-1850.

Respectfully, submitted



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